

8.— *On some South African Ichneumonidae in the Collection of the South African Museum.*—By CLAUDE MORLEY, F.E.S., F.Z.S., Memb. Soc. Entom. de France, etc. Part II.

I HAVE much pleasure in presenting a further account of the parasitic Hymenoptera of Africa, comprising a consignment sent for determination by Dr. L. Péringuey of the Cape Town Museum and including a few additional species from other sources. It is issued in continuation of the former paper by me upon the same subject, which appeared in these Annals late in 1916. All the types of the species herein described as new are, unless otherwise stated, in the South African Museum at Cape Town.

The number of new descriptions is by no means surprising, when the size of the area be considered, along with the paucity of collectors. The outstanding feature of the present contribution to our knowledge of these very beneficial insects is the discovery of a new and most extraordinary Tribe allied to the Banchides.

Also, be it noted, the more we investigate these parasites in all parts of the globe the wider is discovered to be the range of individual species. For at least one kind, recorded herein, no part of the equator seems too hot, though it is also of frequent occurrence so far north as Sweden; another occurs with equal frequency in both Queensland and Assam; and now we find Bengalese insects of this group occurring in Natal. All these are doubtless imported in or along with their Lepidopterous and other hosts' food-plants, shipped in the ordinary course of commerce.

CLASSIFIED CATALOGUE.

ICHNEUMONIDAE.	ΧΑΨΘΟΨΟΡΡΑ, Cam.
ICHNEUMONINAE.	<i>lutea</i> , Cam.
	<i>inermis</i> , sp. n.
<i>Joppides</i> .	ΕΠΙΨΟΡΡΑ, Morl.
LEPTOPHATNUS, Cam.	<i>variabilis</i> , Morl.
<i>ruficeps</i> , Cam.	<i>nigricoxata</i> , Morl.
<i>bucephalus</i> , sp. n.	ΑΓΛΑΟΨΟΡΡΑ, Cam.
ISCHNOΨΟΡΡΑ, Kriech.	<i>rubrithorax</i> , sp. n.
<i>uteator</i> , Fab.	COELICHNEUMON, Thoms.
<i>visibilis</i> , sp. n.	<i>petiolaris</i> , sp. n.

Listrodromides.

NEOTYPUS, Först.
conflatus, Morl.

*Ichneumonides.**Oxyppygini.*

EUPALAMUS, Wesm.
cariniserobes, sp. n.

Amblyppygini.

CHARITJOFFA, Cam.
thoracica, sp. n.

Platyurini.

PLATYLABUS, Wesm.
croccocephalus, Tosq.
nigripalpis, Cam.
bicinctorius, Roman.
Phorcys, sp. n.
hemerythracus, sp. n.
albidornatus, Cam.
Ceta, sp. n.
Lucifer, sp. n.
rufidornatus, Cam.
maculiscutis, Cam.
erythrocephalus, Cam.
pulchellus, Morl.
rufescens, Morl.
vallatus, Morl.
testaceus, sp. n.
miniatulus, Morl.
spilonotus, Cam.

CRYPTINAE.

*Phygadeuonides.**Hemitelini.*

HEMITELES, Grav.
pulchellus, Grav.

*Cryptides.**Mesostenini.*

GORYPHUS, Hlmgr.
corniger, sp. n.
trisulcatus, Morl.
lobatus, sp. n.
cinctitibia, sp. n.
evanescens, Morl.
bisulcatus, Morl.
testaceus, Morl.
Celoen, sp. n.
Ællo, sp. n.

MESOSTENUS, Grav.

Rhodesiae, Cam.
denticlypeus, sp. n.
octans, sp. n.

CRYPTAULAX, Cam.

ruficeps, Cam.

EARRANA, Cam.

rectinervis, sp. n.

Cryptini.

AGLAOCRYPTUS, Cam.

glabratus, sp. n.

CRYPTUS, Fab.

Leighi, Cam.

PIMPLINAE.

Xoridides.

MOANSA, Tosq.
mauliceps, Cam.
GABUNIA, Kriech.
ruficoxis, Kriech.
Togensis, Kriech.

Echthromorphides.

ECHTHROMORPHA, Hlmgr.
variegata, Brullé.

Pimplides.

EXERISTES, Först.
nigricornis, Cam.
THERONIA, Hlmgr.
melanocera, Hlmgr.
XANTHOPIMPLA, Sauss.
renovata, nom. nov.
Natalensis, Cam.

PIMPLA, Fab.

crocata, Tosq.
pubens, sp. n.

EPIURUS, Thoms.

semidilutus, sp. n.

HEMIPIMPLA, Sauss.

divisa, Tosq.
terebrata, sp. n.

Lissonotides.

SYZEUCTUS, Först.

spilocephalus, Cam.
fuscicornis, Cam.
interstitialis, Cam.

ASPHRAGIS, Först.

flavidorbitalis, Cam.
rubricosa, sp. n.

Banchides.

TEGONA, Morley.
discreta, sp. n.

Skiapodes, trib. nov.

SKIAPUS, gen. nov.
coalescens, sp. n.

TRYPHONINAE.

Bassides.

BASSUS, Fall.
lactatorius, Fab.

OPHIONINAE.

Ophionides.

ALLOCAMPTUS, Thoms.
senescens, Tosq.
crassellus, sp. n.
nugalis, Schulz.

HENICOSPILUS, Steph.
vecors, Tosq.
rufus, Kriech.
longeautellatus, Kr.
leionotus, Tosq.

NOTOTRACHYS, Marshall.
flavomaculatus, Cam.

Paniscides.

PANISCUS, Grav.
Æthiopicus, Szépl.
ocellaris, Szépl.

Pristomerides.

PRISTOMERIDIA, Ashm.
albescens, sp. n.
PRISTOMERUS, Curtis.
luteolus, Tosq.

Cremastides.

CREMASTUS, Grav.
annulicornis, Tosq.
noxiosus, Morl.
Cypete, sp. n.

Campoplegides.

XANTHOCAMPOPLEX, Morl.
flavescens, sp. n.
OMORGA, Thoms.
longiceps, Cam.

FAMILY ICHNEUMONIDAE.

SUBFAMILY ICHNEUMONINAE.

TRIBE JOPPIDES.

LEPTOPHATNUS, Cam.

Ann. S. Afr. Mus. v, 1906, p. 165.

This genus certainly belongs to the Joppides, though not so placed by its author. In my Table of Genera of the Joppides (Revis. Ichn. iv, 1915, p. 9), it should be inserted next before the neotropical *Camarota*,* Kriech., from which it differs in its regular areolet and buccate, though not cubical, head. The discovery of its male renders a slight modification of the generic characters essential.

LEPTOPHATNUS RUFICEPS, Cam.

Ann. S. Afr. Mus. v, 1906, p. 166, ♀.

♂. The male differs slightly from Cameron's female description in the following respects: The antennae are setaceous and serrate with

* *Camarota*, Kriechbaumer, Entom. Nachr. xxiv, 1898, p. 4, et Berl Entom. Zeit. xliii, 1898, p. 23, nec Meigen in Diptera, 1830 (cf. Ent. Mo. Mag. 1911, p. 148, etc.), for which I here propose the new name *Camarotella*.

the 21-26 flagellar joints white: the metanotal areola is glabrous and elevated throughout (as in the Indian genus *Cratojoppa*); the scutellum is laterally carinate to near its apex; the postpetiole is but obsoletely aciculate, with apex distinctly punctate; the seventh abdominal segment alone is white and the venter plicate throughout; front tibiae internally white-lined—*tarsi postici desunt*.

Taken at Mfongosi in Zululand by W. E. Jones during May, 1916.

LEPTOPHATNUS BUCEPHALUS, sp. nov.

♂ only. A large and somewhat dull black species with the wings nigrescent throughout, the head red and both flagellar band and four apical hind tarsal joints, as well as inner side of front tibiae, white. Length 16 mm.—So like the above ♂ as to need no detailed description. Therefrom it differs in no more than a few, though pertinent, characters: Head clear red; cheeks slightly, and the temples very strongly, more buccate; pronotum also red; mesopleurae punctate to immediately below speculum; postpetiole shagreened throughout and not apically punctate; abdomen narrower, with the apical segments immaculate; hind tarsi pure white, with only metatarsus and ungues black; wings somewhat narrower, with radius less curved both above areolet and at its apex. I should have hesitated to regard these details as sufficient to warrant specific rank were it not that the metanotal areola, though equally elongate and narrow, is rugulose throughout and not at all elevated.

The type occurred to R. M. Lightfoot at East London during 1915.

ISCHNOJOPPA, Kriech.

Ent. Nachr. xxiv, 1898, p. 32.

ISCHNOJOPPA VISIBILIS, sp. nov.

♂ ♀. An elongate, testaceous and somewhat dull species with only the white-banded flagellum, mandibular apices, ocellar region, posterior tarsi and disc of hind tibiae black. Head posteriorly and cheeks very strongly buccate; face glabrous, nitidulous and impunctate; frontal orbits not elevated, frons centrally bicarinate. Antennae slender, as long as body; of ♂ serrate, of ♀ compresso-dilated, beyond their centre. Thorax discally dull; mesonotum basally depressed, apically and laterally elevated, with strong and subcarinate notauli; mesopleurae glabrous and nitidulous; metathorax laterally finely, and discally rugosely punctate, black-pilose between the distinct basal and obsolete apical transcarinae. Scutellum ephippiform, discally deplanate and punctate, with its sides and apex strongly and conspicuously carinate

or, rather, vellate; postscutellum small, transverse and, at least in ♀, basally margined. Abdomen elongate-fusiform and much longer than head and thorax; basal segment indistinctly punctate, slender and fully thrice as long as apically broad, with the ♂ spiracles prominent; second segment basally constricted to the small gastrocoeli at its basal third; terebra nigrescent only at extreme apex. Legs very slender and strongly elongate. Wings fulvescent-hyaline with stigma and the subcosta testaceous, nervures infusate; areolet somewhat large, nearly coalescent above, emitting the broadly bifenestrate recurrent nervure from distinctly before its centre; nervellus sinuate, emitting spurious nervure from its lower fourth. Length, ♂ ♀, 15 mm.

In 1915 I restricted this genus to a single species, ranging through Africa, India and Australia. A second was brought forward in 1916 (Ann. S. Afr. Mus. p. 358). I am glad to recognise another, so distinct as to render a glance sufficient to differentiate it, by its longer antennae and legs, irregular mesonotum, circumvellate scutellum and the antecentral emission of the recurrent from areolet.

Marley took the female type at Kranzkloof in Natal during May, 1915; and the androtype occurred to W. E. Jones at Mfongosi in Zululand.

XANTHOJOPPA, Cam.

Ann. Nat. Hist. vii, 1901, p. 378 = *Anisojoppa*, Cam. Ann. S. Afr. Mus. v, 1906, p. 168.

The distinctions between the descriptions of these two genera consist solely in the size of the gastrocoeli and the sculpture of the meta-notum, though not of its carinae; and an examination of the type of the former and a co-type of the latter genus proves them to be synonymous. The main feature of distinction, I think, was overlooked by their author: I find the anterior claws of the former to be simple and those of the type species of the latter stoutly pectinate; but this character is inconstant, and doubtless (as in *Neotypus*) at most sexual.

XANTHOJOPPA LUTEA, Cam.

Anisojoppa lutea, Cam. Ann. S. Afr. Mus. v. 1906, p. 168, ♂ ♀.

Cameron dismisses the ♂ of this species in a dozen words; but it differs from his ♀ description in having the head and thorax 7 mm. in length, the abdomen no more than 11 mm.; the meta-notum rugulose throughout; the gastrocoeli very broad and deeply impressed, with the intervening space not at all striate; the flagellar joints 14-21 alone are white; the stigma fulvous; the face sparsely punctate throughout.

postpetiole shagreened and not at all punctate; the anterior onyches are stoutly pectinate. The metanotal areola is hexagonal and not longer than broad, with its apex truncate and base both semicircular and elevated.

The species has been further found at Stella Bush near Durban in Natal during February, 1915, by H. W. Bell Marley and at Mfongosi in Zululand by W. E. Jones.

XANTHOJOPPA INERMIS, sp. nov.

♂ ♀. A large testaceous species, with the pleurae and coxae paler, the face but not frontal orbits flavous, and band of the black flagellum white; legs with tarsal claws and hind tarsi alone black. ♀ with hind knees and lateral mesonotal vittae also black. Onyches not at all pectinate. Length 14–15 mm.—It is extremely like the last species but differs, besides the conclusive simple claws, in having the sides of the areolet nearly coalescent above and the ramellus obsolete, the scutellum more convex and apically as well as laterally carinate; all trace of metanotal areola wanting in ♂, which has the postpetiole much narrower and abdomen less parallel-sided; the ♀ is distinct in its nigrescent mesonotal streaks and hind knees.

Mfongosi in Zululand (W. E. Jones) and East London during 1915 (R. M. Lightfoot).

EPIJOPPA, Morley.

Revis. Ichn. iv, 1915, p. 49.

EPIJOPPA VARIABILIS, Morl.

lib. cit. p. 52, ♂ ♀.

Described from Nyassaland and the Uganda Protectorate. Mr. W. E. Jones has extended its known southern range by the capture of a male at Mfongosi in Zululand during April, 1916.

EPIJOPPA NIGRICOXATA, Morl.

lib. cit. p. 53, ♂ ♀.

Also described from Central Africa and one male found with the last by W. E. Jones.

AGLAOJOPPA, Cam.

Ann. Nat. Hist. vii, 1901, p. 381.

AGLAOJOPPA RUBRITHORAX, sp. nov.

♂ only. A dull black species with white pubescence and the thorax, except below, rosy; white-marked. Head buccate and closely

punctate; orbits, except at cheeks and temples, and the clypeus laterally white. Antennae immaculate black, with the joints subserrate. Thorax closely punctate, only black below and at the apex; pronotum discally, callosities below radices and basal lateral scutellar dots, white; metathorax convex with areola peculiarly elongate, twice as long as broad and emitting costulae from its centre; petiolar area short and vertical. Scutellum rosy, punctate and laterally margined to near its apex; postscutellum white. Abdomen black with apices of the four basal and of the seventh segments white, those of the second and third centrally interrupted; basal segment smooth and shining with a few scattered punctures; venter plicate on second to fourth segments, with the second and third white-margined. Legs normal and black with inner side of front tibiae and apices of their femora white. Wings subhyaline, with stigma and nervures black; areolet pentagonal, not coalescent above and emitting recurrent nervure slightly beyond its centre; discoidal cell with its lower external angle obtuse and nervelet short. Length, 14 mm.—It is the only known species of this genus with red thorax.

The type was captured at Mfongosi in Zululand by W. E. Jones during May, 1916.

COELICHNEUMON, Thoms.

Opusc. Entom. xviii, 1893, p. 1901.

COELICHNEUMON PETIOLARIS, sp. nov.

♀ only. A stout and dull brick-red species with a central flagellar band white and a mesonotal line, the frenum, areola and petiolar area, base of petiole and the hind tarsi, indefinitely black; apex of postpetiole clearly and deeply punctate both discally and laterally. Length, 13 mm.—Quite unlike the species from the palaearctic, Indian or New World regions (tabulated in my Revis. Ichn. iv, 1915, p. 120) in its immaculate face, tibiae and intermediate femora; in the distinctly punctate postpetiole; and immaculate rufescent abdomen. It is most closely allied to *C. rudis*, Fonse.; therefrom it differs in its coloration, smaller size, much less buccate cheeks, deeper clypeal foveae, closely punctate mesonotum and scutellum, more evenly punctate metanotum, not at all rugose postpetiole, centrally punctate base of the second segment, lack of ramellus and the lower emission of the spurious nervure from nervellus.

The type was taken at "Gilletts, Natal," during September, 1915 by H. W. A. Bell-Marley.

TRIBE LISTRODROMIDES.

NEOTYPUS, Först.

Ver. pr. Rheinl. 1868, p. 194.

NEOTYPUS CONFLATUS, Morl.

Ann. S. Afr. xv, 1916, p. 359. ♀.

♂. A very robust, and somewhat small, dark red male with black and several white markings. Head stramineous with the frons, vertex and part of occiput, mandibular apices, a line down the buccate cheeks and another down centre of face, black; vertical marks, cheeks externally and more or less of occiput rufescent; face finely and sparsely punctate, frons glabrous and excarinate, and vertex not broad. Antennae very short and stout; scape black with its under side and apex white; flagellum immaculate brunneous, filiform, of 25 transverse joints, only the three basal being longer than broad and of these the first is shorter than the second. Thorax nitidulous, short and hardly longer than high, with sternum and frenum and basal metanotal sulcus black, callosities before and below radices and whole of the transverse postscutellum white; mesonotum deeply and sparsely punctate, with no notauli; mesopleurae glabrous, with similar puncturation and the sternauli half their length; metathorax very short and subreticulate with petiolar area deeply impressed, parallel-sided and rising nearly to base, where is a small and strongly transverse areola; costulae strong, spiracles large and linear. Scutellum not small, simply convex, shining and sparsely punctate, laterally carinate to near apex. Abdomen subelongate-ovate, shining with the transverse second and third segments dull, very dark red with apices of all segments but the third broadly flavous; petiole long and slender, postpetiole abruptly explanate, glabrous with a few central punctures; second and third segments closely punctate, with gastrocoeli of the former deeply impressed and not small; valvulae white. Legs black, stout and not short; all the coxae, inner side of anterior tibiae and apices of their femora below, white; anterior tarsi and remainder of their tibiae rufescent; hind coxae evenly punctate; tarsi not pectinate. Wings hyaline; radix and tegulae stramineous; stigma nigrescent and not narrow; basal nervure subvertical, and the lower basal distinctly a little antefurcal; discoidal cell short and broad, emitting short ramellus and another slight nervure from centre of second recurrent, which rises from centre of the somewhat large and subquadrate areolet;

radius apically straight and not elongate; nervellus subopposite and hardly angled at its lower fourth. Length, 9 mm.

This androtype is labelled "Congella," where W. A. Bell-Marley captured it in March, 1915.

TRIBE ICHNEUMONIDES.

SUBTRIBE OXYPYGINI.

EUPALAMUS, Wesm.

Nouv. Mém. Ac. Brux. 1844, p. 13; Morl. Ann. S. Afr. Mus. xv, 1916, p. 362.

EUPALAMUS CARINISCROBES, sp. nov.

♂ ♀. A large and stout, shining and dark red species, with only the white-banded flagellum and apical half of abdomen black; frontal orbits broadly, and in ♂ face etc., white; juxta-scrobal orbits carinate. Head of ♂ with face, clypeus, external orbits and under side of the black scape, white. Thorax very finely and closely punctate with pronotum almost glabrous and metanotum to the infra-spiracular carinae rugose, its areola double as long as broad, remote from base, emitting distinct costulae from its centre; petiolar area short and discreted; ♂ with pronotum and callosity beneath radices flavous. Scutellum deplanate and glabrous with a few fine punctures, laterally carinate to near its apex which in the ♂ is, like the postscutellum, flavous. Abdomen stout with the third to fifth and sides of sixth segments black, the remainder and in ♂ apices of second and third narrowly, white; basal segment broad and very finely shagreened; second closely punctate with small gastrocoeli, third far more finely sculptured and remainder nearly smooth. Legs stout and elongate, with claws large and simple; hind coxal scopulae of ♀ large; ♂ with inner side of front tibiae, and three apical joints including claws of its otherwise black hind tarsi, white. Wings ample and distinctly fulvescent with costa and nervures black, stigma and tegulae fulvous; nervures exactly as in *E. Wesmali*, excepting the areolet which is slightly less produced internally, and a little curved externally, with its sides coalescent above. Length, ♂ ♀, 17 mm.—This species is a true *Eupalamus*, bearing all the characters ascribed to that genus by Thomson (Ann. Soc. Ent. France, 1886, p. 11); the colour, but especially the coxal scopulae, differentiate it from *E. convexius* (Ann. S. Afr. Mus. xv, 1915, p. 362).

Both sexes were discovered by W. E. Jones at Mfongosi in Zululand during April and May, 1916.

SUBTRIBE AMBLYPYGINI.

CHARITJOJOPPA, Cam.

Ann. Nat. Hist. vii, 1901, p. 383.

Head with neither clypeus discreted nor labrum exerted; mandibles stout, with the upper tooth slightly the longer; cheeks elongate and strongly buccate. Antennae stout and, beyond their centre, compresso-dilated. Meso- and meta-notum strongly reticulate; areola smooth, apically incomplete, with its lateral carinae extending to petiole and widely divergent. Scutellum more or less pyramidal, with at least its base laterally margined. Abdomen with second and third segments closely aciculate-punctate and ventrally plicate throughout; gastrocoeli of the former somewhat large and deeply impressed; petiole basally constricted, and apically abruptly explanate; terebra basally covered by hypopygium. Legs stout, with the penultimate hind tarsal joints spinose. Areolet triangular, laterally nearly coalescent above and straight below, above junction of recurrent nervure; radius apically subreflexed; basal nervure not continuous through the median. Colour brilliant metallic.

The above is the original description emended from the type specimen in the British Museum. I find our African representative a very typical species of this East Indian genus, which its author considered closely related to *Magrettia* (= *Xenjojoppa*, Cam.), from which it differs in having the scutellum usually subpyramidal and not apically incised, the coxae mutic, and the central abdominal segments longitudinally aciculate. The scutellar structure allies the genus to the Joppides, from which it is excluded by its total lack of basal metanotal sulcus.

CHARITJOJOPPA THORACICA, sp. nov.

♂ only. A stout, metallic species with white pilosity; the head black, antennae and thorax red, metathorax green, abdomen and legs steel-blue. Head very strongly buccate behind the prominent eyes; vertex broad and subglabrous; face and clypeus evenly punctate, the former broadly stramineous on either side, the latter a little reflexed along its rounded apex; mandibles subglabrous and stout, with a basal stramineous mark. Antennae of forty-one joints, setaceous, serrate throughout, stout and hardly extending to the metathoracic apex, brick-red and apically darker, with the two basal flagellar joints (which alone are longer than broad) and scape, black. Thorax metallic

green with the dull and reticulate mesonotum, the mesopleurae, base of pronotum on either side and its extreme apical margin, sanguineous-red; notauli and sternaui wanting, mesopleurae transversely impressed centrally; metanotum nitidulous and rugulose, its areola large and hexagonal, extending to base and emitting costulae from its centre. Scutellum, postscutellum and frenum red; the first elevated, but hardly pyramidal, very coarsely rugose and laterally carinate to its flavidous apex; postscutellar region metallic blue, with its apical margin stramineous. Abdomen cyaneous with apices of all the segments, but fourth, stramineous; basal segment glabrous and obsoletely aciculate apically; second and third very closely punctate and dull. Legs somewhat short and not slender, with anterior tarsi and their tibiae laterally white. Wings normal; tegulae fulvous, radix and stigma nigrescent; recurrent emitted slightly beyond centre of areolet. Length, 11 mm.

The type was found by W. E. Jones at Mfongosi in Zululand during May, 1916.

SUBTRIBE PLATYURINI.*

PLATYLABUS, Wesm.

Nouv. Mém. Ac. Brux. 1844, p. 150; Morl. Ann. S. Afr. Mus. xv,
1916, p. 368.

Some of the southern African species of this genus are so closely allied that a superficial tabular guide appears desirable.

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|-------|-----|---|-------------------------------|
| (2). | 1. | Flagellum dilated before apex; notauli deep. | <i>crocecephalus</i> , Tosq. |
| (1). | 2. | Flagellum not dilated; notauli obsolete or wanting. | |
| (20). | 3. | Head, at least discally, black. | |
| (7). | 4. | Palpi infusate or black, never pale. | |
| (6). | 5. | Gastrocoeli of second segment deeply impressed. | <i>nigripalpis</i> , Cam |
| (5). | 6. | Gastrocoeli of second segment small, triangular. | <i>bicinctorius</i> , Roman |
| (4). | 7. | Palpi always pale; gastrocoeli superficial. | |
| (17). | 8. | Disc of thorax entirely red; stigma black. | |
| (10). | 9. | Second segment red; hind coxae discally white. | <i>Phorcys</i> , sp. nov. |
| (9). | 10. | Second segment not red-marked; hind coxae black. | |
| (16). | 11. | Metanotal areola subcircular; mesonotum dull; punctate. | |
| (13). | 12. | Apophyses acute; central segments white-banded. | |
| | | | <i>hemerythraeus</i> , sp. n. |
| (12). | 13. | Apophyses wanting; central segments not white-marked. | |
| (15). | 14. | Flagellum immaculate; hind calcaria white. | <i>albidornatus</i> , Cam. |

* Cameron places his new genus *Phaisura* (Ann. S. Afr. Mus. v, 1906, p. 170) in the Joppides. An examination of two co-typical males, the only sex known, in the British Museum, has convinced me that the genus belongs to the Platyurini.

Scutellum brick-red, convex and laterally margined to near apex. Abdomen black with the second segment laterally indefinitely, and whole of the first, in ♀ red; anus, apices of second and fifth segments, with apical angles or in ♀ the apex of the evenly punctate basal segment, white; terebra a little exerted, ♂ valvulae white. Legs elongate and not slender, rufo-infusate with all coxae, trochanters and hind tarsi black; ♂ with trochanters, intermediate coxae beneath and centre of posterior tarsi, white. Wings normal and hyaline, with nervures and stigma black; second recurrent nervure broadly fenestrated and emitted from centre of the sessile areolet; basal nervure continuous through the median. Length, ♂ ♀, 12 mm.—Evidently allied in its continuous basal nervure, etc., to *P. erythrocephalus*, Cam., though differing in colour, in the evenly punctate postpetiole and in many other points.

Both sexes were taken at Mfongosi in Zululand by W. E. Jones during February, 1914 and May, 1916.

PLATYLABUS CETA, sp. nov.

♂ ♀. A black species with sparse white markings, the thorax entirely rosy. Both sexes of this insect differ from the above description of *P. hemerythraeus* only in the following particulars: Head, scutellum, metathorax and basal segment more sparsely punctate and slightly nitidulous. Head with vertical orbits broadly white, mandibles red and in ♂ the whole face and clypeus, mandibular base and all the orbits but at the temples, white. Antennae less attenuate apically, not basally red; scape of ♂ white beneath. Metathorax without apophyses, areola subcircular and apically emarginate. Scutellum glabrous and nitidulous, deplanate and laterally margined only to its apical third. Second to fifth segments immaculate black, or in ♂ sometimes ladius, the first not white-marked; postpetiole shagreened and in ♂ red. Hind legs dead black, with only their trochanters white. Length, ♂ ♀, 9 mm.—The male of this species differs from *P. Lucifer* in its somewhat duller mesonotum, subcircular areola, immaculate hind tarsi and basal segment, and in its smaller size.

The female type, with three males, was captured at Mfongosi in Zululand by W. E. Jones during April and May, 1916.

PLATYLABUS LUCIFER, sp. nov.

♂ only. A black species with white markings, and the thorax except beneath rosy. Too closely allied to *P. hemerythraeus* to need a detailed description. Therefrom it differs in the much more nitidulous and sparsely punctate body, the totally white face and clypeus, white

mandibular base, external orbits, underside of scape and callosity below radices; in the glittering and convex speculum, deplanate scutellum, much longer areola emitting costulae from its centre, wanting basal area; immaculate fifth segment, white front coxae and underside of their tibiae. The postpetiole is obsoletely shagreened, with a few scattered punctures. Length 14 mm.

The type was found by W. E. Jones during May, 1916, at Mfongosi in Zululand.

PLATYLABUS VALLATUS, Morl.

Ann. S. Afr. Mus. xv, 1916, p. 370, ♂.

This ♂ sometimes has the mesonotum laterally, and centre of scutellum longitudinally, black; the carinae of the latter are sometimes pale, and the stigma occasionally testaceous. Mr. Jones found a male with these modifications in Zululand at Mfongosi during May, 1916.

PLATYLABUS TESTACEUS, sp. nov.

♂ ♀. A nearly unicolorous testaceous and dull species; only the head, scutellum, anus and pleurae are indeterminately flavescent; the mandibular apices, ocellar region narrowly, apical half of flagellum, claws or in ♂ hind tarsi, the terebra, and sometimes part of the sixth and seventh segments, black. Head posteriorly short; cheeks very long and buccate; face evenly punctate and not apically discreted; frons nitidulous and subglabrous. Antennae white-banded, with apical half a little compresso-dilated, in ♂ subserrate. Notauli indicated; metathorax finely coriaceous with areola hexagonal, as long as broad, entire, with central costulae; basal area distinct, apophyses wanting, spiracles elongate. Scutellum glabrous and glittering, subconvex and laterally margined to near its apex. Abdomen dull and coriaceous, apically more or less infuscate before the white anus; postpetiole shagreened; thyridii somewhat broad, with the intervening space strigose; terebra slightly exerted. Legs not slender, paler basally; tarsal claws large. Wings ample and subflavescent with radix and stigma testaceous, nervures darker; areolet small and triangular, nervelet usually obsolete or wanting. Length ♂ ♀, 7-11 mm.—Slightly variable in the depth of the testaceous coloration, in extent of black before the anus; sometimes the ♂ hind tibiae are apically subinfuscate, and in one example their base is also distinctly nigrescent.

Nearly a dozen examples occurred to Mr. W. E. Jones at Mfongosi in Zululand during April and May, 1916.

SUBFAMILY CRYPTINAE.

TRIBE PHYGADEUONIDES.

SUBTRIBE HEMITELINI.

HEMITELES, Gravenhorst.

HEMITELES PULCHELLUS, Grav.

Ichn. Europ. ii, 1829, p. 854, ♀.

A palaeartic species, known from Germany, France and the Channel Islands; doubtless imported here. One female was bred by Lightfoot at "Cape Town, January, 1909, from larvae of the Geometrid moth *Osteodes turbulentata*, Guén.; feeds on *Acacia horrida*."

TRIBE CRYPTIDES.

SUBTRIBE MESOSTENINI.

GORYPHUS, Holmgr.

Eug. Res. Ins. 1868, p. 398; Morley, Ann. Nat. Hist. xiv, 1914, p. 410.

The species of this genus are extremely puzzling and so closely allied that general descriptions are vain repetitions. Careful distinctions are essential, and for that purpose I here present a table of such as I have seen from South Africa. I am convinced that the white abdominal markings are inconstant.

- | | | | |
|-------|-----|--|-------------------------------|
| (14). | 1. | Normally stout, black-and-red species. | |
| (13). | 2. | Second recurrent emitted from near centre of areolet. | |
| (12). | 3. | Postpetiole subglabrous or scabrous, not bicarinate. | |
| (5). | 4. | Clypeus pyramidally produced centrally. | <i>corniger</i> , sp. nov. |
| (4). | 5. | Clypeus not produced. | |
| (11). | 6. | Metanotum unicarinate, basally rugulose. | |
| (8). | 7. | Mesonotum discally sulcate; terebra a third the length of abdomen. | <i>trisulcatus</i> , Morl. |
| (7). | 8. | Mesonotum not so; terebra = $\frac{2}{3}$ of abdominal length. | |
| (10). | 9. | Arolet normal, angled below; hind tibiae black. | <i>lobatus</i> , sp. nov. |
| (9). | 10. | Arolet small, straight below; hind tibiae basally white. | |
| | | | <i>cinctitibia</i> , sp. nov. |
| (6). | 11. | Metanotum bicarinate, basally glabrous. | <i>evanescens</i> , Morl. |
| (3). | 12. | Postpetiole striolate, longitudinally bicarinate. | <i>bisulcatus</i> , Morl. |
| (1). | 14. | Strongly elongate, slender, testaceous species. | |

- (16). 15. Metathorax evenly scabrous; internal orbits normal.

testaceus, Morl.

- (15). 16. Metathorax trans-striate throughout; internal orbits elevated.

- (18). 17. Face and frons reticulate; clypeus normally convex.

Celoeno, sp. nov.

- (17). 18. Face and frons finely punctate; clypeus very convex. *Ello*, sp. nov.

GORYPHUS CORNIGER, sp. nov.

♀ only. A not very stout, black species with white markings; the thorax and head red, and terebra as long as basal segment; frons not centrally carinate. Head, four basal antennal joints, thorax except sternum, frenum and basal area, sides of first segment and disc of hind coxae, red; flagellar band, apex of second segment and anus from apex of fifth, calcaria, anterior coxae beneath and inner side of front legs, white. Very closely allied to *G. bisulcatus*, but differing therefrom in its centrally scabrous postpetiole, the colour of the coxae and hind femora, and in the usually apically white-margined second segment. Before its apex the clypeus is produced into a vertical and sub-acuminate pyramidal tooth. Length, 8-9 mm.

Taken with the next species during May in Zululand.

GORYPHUS LOBATUS, sp. nov.

♀ only. A somewhat stout, black species with white markings; the thorax entirely red, and terebra nearly as long as abdomen; frons centrally carinate. From my description of the female *G. trisulcatus* (Ann. S. Afr. Mus. 1916, p. 372) it differs only in the following particulars: Head obliquely constricted behind the eyes; antennae no stouter beyond their white band; mesonotum not discally sulcate between the notauli; abdomen with apex of second but not of first segment white, the fifth and sixth immaculate black, and terebra as long as abdomen excepting basal segment; calcaria not white; wings hyaline. Length, 9 mm.—The structure of the penultimate hind tarsal joint, which is centrally cleft nearly to its base and strongly pectinate, is unique in my experience and somewhat resembles that of *Spilocryptus* females.

Mfongosi in Zululand, taken by W. E. Jones during May, 1916.

GORYPHUS CINCTITIBIA, sp. nov.

♀ only. A somewhat stout, black species with sparse white markings; the thorax and head entirely red, and terebra nearly as long as abdomen; frons centrally carinate. Nothing but the conformation of the areolet convinces me of specific distinction from *G. lobatus*. The

lower nervure is distinctly angled at the central emission of the recurrent nervure in that species, while here the lower nervure is straight throughout and the recurrent emitted at its apical third. In coloration this insect differs in having its head red, second segment immaculate, and (agreeing with *G. basalis*) in the conspicuous sub-basal white band of its hind tibiae. Length, 9 mm.

The type is from Durban in April, 1915 (H. W. Marley); a co-type from Mfongosi in Zululand in April, 1916 (W. E. Jones).

GORYPHUS TESTACEUS, Morl.

Ann. S. Afr. Mus. xv, 1916, p. 375, ♂.

♂ ♀. Both sexes have the basal segment elongate—about five times longer than apically broad—and sublinear, the basal metanotal transcarina obsolete and strongly sinuate, more usually the stigma is testaceous, and their length varies from $6\frac{1}{2}$ –9 mm.—The undescribed female differs from my male description (*loc. cit.*) in having the hind tarsi, calcaria and tibiae fulvous, with the claws and onychii alone black; antennae nearly as long as body, slender and black with the basal flagellar joints and scape fulvous, in both sexes; abdomen elongate-fusiform with the deflexed terebra infusate and as long as basal segment, which is fully a third of the abdomen in length.—The gynotype is from Kloof, Durban in Natal, during February, 1915 (H. W. Bell Marley); and further males are from Mfongosi in Zululand during April and May, 1916 (W. E. Jones).

GORYPHUS CELOENO, sp. nov.

♂ only. A dull and slender, dark testaceous species with the flagellum except its subapical white band, ocellar region, posterior tarsi and a basal dot on inner side of hind tibiae, black; the three mesonotal lobes and anus indefinitely infusate, and pleurae ochraceous. Instantly known from all other species of this genus by its stoutly and irregularly reticulate-striate frons and face, which latter is quadrate; the clypeus is but slightly convex and apically rounded; the inner orbits carinately elevated; metanotum with no apical transcarina, basal area indistinct; metapleurae deeply impressed longitudinally above, not carinate; basal segment linear and glabrous. Length, 11 mm.—Were it not for the typically *Goryphus*-structure of the areolet I should place this male in the Cryptini genus *Friona*, Cam., with which the sculpture of its metathorax so well agrees—this is stoutly and evenly trans-striate throughout both notum and pleurae from the basal carina.

Taken during 1913 at Durban in Natal by W. Haygarth.

GORYPIUS AELLO, sp. nov.

♀ only. A dull and slender, pale testaceous species with the flagellum except its subapical white band, and ocellar region, alone black; hind tarsi and terebral valvulae infuscate; head except frons, pleurae and frenum stramineous; terebra half length of abdomen. Recognised by its very strongly convex clypeus, evenly punctate face, elevated orbits which extend to either side of ocelli, the longitudinally sulcate central mesonotal lobe. In all other respects, especially the metathoracic structure, it agrees exactly with *G. Celoen*, of which I cannot consider it the opposite sex. Length, 8 mm.—These two species have nothing in common with *Plesiocryptus carinifrons*, Cam. (Zeits. Hym.-Dip. iii, 1903, p. 300, ♀ = *Bathycrisis striaticollis*, Cam. Spolia Zeylanica, iii, 1905, p. 97, ♂) for, though equally elevated, the orbital structure is entirely different.

W. E. Jones found the type during May, 1916, at Mfongosi in Zululand.

MESOSTENUS, Gravenh.

MESOSTENUS RHODESIAE, Cam.

Ann. S. Afr. Mus. v, 1906, p. 145, ♀.

♂ ♀. Areolet small and quadrate, very slightly broader than high; apically subpellucid, emitting recurrent nervure from its centre; lower basal nervure always a little antefurcal; nervellus strongly postfurcal and geniculate a little above its centre, at junction of the strong spurious nervure. Notauli remarkably deeply impressed. The undescribed ♂ differs only sexually. Several examples of both sexes were found by W. E. Jones during May, 1916, at Mfongosi in Zululand.

MESOSTENUS DENTICLYPEUS, sp. nov.

♂ ♀. A slender, rich testaceous, shining species with the head, antennae, onychii, terebra and in ♂ central mesonotal lobe, deep black; face, mouth, cheeks, all the orbits broadly and the flagellar band, white. Head large and buccate, posteriorly as broad as the eyes; occiput and frons glabrous and mutic; face and clypeus sparsely punctate, the latter elongately dentate centrally and emarginate on either side. Thorax shining and subglabrous with notauli deeply impressed and petiolar area closely punctate; both metanotal transcarinae strong, the apical curved; apophyses wanting, spiracles elongate and not small. Scutellum deplanate, smooth and not laterally margined. Abdomen narrow, dull and closely punctate; basal segment linear with slightly prominent spiracles a little beyond its

centre; ♂ valvulae exerted, terebra straight and as long as abdomen except first segment. Legs normal and not stout; claws small, calcaria short. Wings fulvescent hyaline, of ♂ subinfumate; nervelet wanting; basal nervure continuous; areolet of normal size, subquadrate, emitting the straight recurrent nervure from slightly before its centre. Length, ♂ ♀, 12 mm.—The clypeal structure is remarkable.

Both sexes occurred at Mfongosi in Zululand to W. E. Jones in May, 1916.

MESOSTENUS OCTANS, sp. nov.

♀ only. A somewhat slender, brick-red, dull species with the head, antennae, apical half of abdomen, hind coxae, femora and two apical joints of their tarsi, black; labrum, vertical orbits, flagellar band, apices of third and fourth and seventh segments narrowly, with whole of the large and prominent eighth, and the three central hind tarsal joints, white. Clypeus apically depressed and truncate; notauli deeply impressed; both metanotal transcarinae distinct, its petiolar area striate; basal segment stout, shagreened and only double as long as its apical breadth; terebra one-third of abdomen; areolet small and quadrate, emitting recurrent nervure before its centre; nervelet wanting, upper basal nervure postfural. Length, 12 mm.—The coloration is distinctive.

Taken with the last species at Mfongosi in Zululand by W. E. Jones.

CRYPTAULAX, Cam.

CRYPTAULAX RUFICEPS, Cam.

Ann. S. Afr. Mus. v, 1906, p. 151. ♂ ♀.

Arolet small and quadrate, emitting recurrent nervure from its centre.

A female has been taken at Mfongosi in Zululand by Jones during April, 1916.

EARRANA, Cam.

Spolia Zeylanica, iii, 1905, p. 119.

Parca, Morl. Indian Ichns. i, 1913, p. 361.

Essential Characters.—Metathoracic spiracles circular; areolet wanting; clypeus neither reflexed nor apically depressed; mesosternum not laterally spinate; abdomen not metallic. The following species is sufficiently congruous with *E. lutea*, Cam. (= *P. ocellaria*, Morl.), to allow of its inclusion in this somewhat anomalous genus, though the upper basal nervure is distinctly a little antefural.

EARRANA RECTINERVIS, sp. nov.

♀ only. A small and slender, somewhat dull, rufo-testaceous species, with the mandibular apices and flagellum except basally, alone black; face, vertical orbits broadly and a subapical flagellar band, white; terebra slender, half length of abdomen and, like the hind tarsi, apically infusate. Head vertical and evanescent behind the prominent eyes; face strongly transverse, finely shagreened and not discreted from the convex and apically rounded clypeus. Antennae as long as the body. Notauli and sternaui deeply impressed; metathorax elongate and somewhat narrow, evenly shagreened throughout with a very weak central and distinct apical, straight transcarina; petiolar area short and nearly smooth. Scutellum small, dull and nearly smooth, only basally carinate. Abdomen finely shagreened throughout with basal segment nearly smooth, fully twice longer than apically broad. Legs long and very slender. Wings somewhat narrow, with the disco-cubital nervure perfectly straight; areolet half as broad again as high, its apical nervure wanting, though indicated; nervellus postfurcal, centrally intercepted. Length, 7 mm.

Mfongosi in Zululand, April, 1916, W. E. Jones.

SUBTRIBE CRYPTINI.

In view of the considerable literature likely to arise when the Ichneumonidae of Africa come to be more fully collected, it were well to here point out that the distinctions between the subtribes *Mesostenini* and *Cryptini* (which together constitute the tribe Cryptides of the subfamily Cryptinae) are extremely obscure and consist solely in the conformation of the alar areolet. The Cryptinae, as a whole, are the least specialised and, consequently, most difficult group of the entire Ichneumonidae. In the palaearctic fauna it is sufficient to describe this areolet (as is done in my *Ichn. Brit.* ii, 1907, pp. 258 and 266) as small and quadrate in the *former* subtribe, pentagonal and of normal size in the *latter*; but throughout the tropics the *Mesostenini* show much greater variability in this respect, which is still our sole guide to differentiation, and it is misleading to state, as does Cameron of his genus *Stenomomeris* (*Ann. S. Afr. Mus.* v, 1906, p. 154), that "the form of the areolet does not give always a trustworthy distinction between the two"; for if such be the case, they must be merged. That there is a constant, though subtle, distinction I am convinced; and the already enormous—ere long, overwhelming—number of the world's species in both these subtribes renders it convenient to retain them apart. The test to which I subject individuals is a (more or less) regularly pentagonal areolet of variable

size for the *Cryptini* and a quadrate or (to any extent, breadth, and size) transverse areolet for the *Mesostenini*. Into these two, certainly very loose, divisions I find all the genera with which I am acquainted fall sufficiently naturally with no overlapping except in the case of the Indian genus *Etha*, under which name Cameron had congregated examples of both wing-types. The "small, square" areolet of *Stenomeris* shows it to unmistakably belong to the *Mesostenini*.

AGLAOCRYPTUS, Cam.

Mem. Manch. Soc. 1903, no. 14, p. 31.

Habrocryptus, Thoms. Opusc. Ent. v, 1873, p. 498.

AGLAOCRYPTUS GLABRATUS, sp. nov.

♀ only. A strongly nitidulous, testaceous species with only the abdomen somewhat dull; ocellar region to centre of occiput, mandibular apices, flagellum and dot on scape, onychii, costa and stigma. black; remainder of head, and the flagellar band, white. Head broad and glabrous with the face longitudinally sulcate between epistoma and orbits, clypeus apically depressed and truncate, labrum exserted, Notauli profound and entire to disc of mesonotum; metathorax glabrous with both transcarinae strong and entire, its spiracles exactly circular and apophyses wanting. Scutellum smooth, not margined. Abdomen narrow and confluent punctate, with anus smoother and basal segment glabrous; terebra a little shorter than abdomen. Legs and the hyaline wings normal, with penultimate joint of hind tarsi deeply bilobed; areolet small and pentagonal, emitting recurrent nerve from its centre; nervelet wanting; upper basal nervure and nervellus postfurcal, the latter centrally intercepted. Length, 9 mm.—There is nothing distinctive about this species (which has the facies of a small *Mansa*, Tosq. = *Colyanta*, Cam.) but its subglabrous body, circular spiracles and bisulcate face.

The type was taken at Durban in Natal during February, 1913, by W. Haygarth.

CRYPTUS, Fabr.

Syst. Piezat. 1804.

CRYPTUS LEIGHI, Cam.

Ann. S. Afr. Mus. 1906, v, p. 141, ♀.

This is a member of the present genus, *sensu Thomsoni*.

"Kraunkloof," Durban, in Natal: a female by Bell Marley on October 9th, 1915.

SUBFAMILY PIMPLINAE.

TRIBE XORIDIDES.

MOANSA, Tosq.

Mém. Soc. Entom. Belg. v, 1896, p. 344.

Gonioprymnus, Cam. Ann. S. Afr. Mus. v, 1906, p. 126.

MOANSA MACULICEPS, Cam.

Gonioprymnus maculiceps, Cam. Ann. S. Afr. Mus. v, 1906, p. 126, ♀.

The hitherto unknown ♂ of this conspicuous species differs very slightly from the ♀ description in having the external orbits shortly, and hind femora externally, streaked with white; the second as well as third segment bears an impressed triangle, and both are united to the base by an impressed discal line; the apex of the fourth segment is dorsally emarginate and the metathorax is shortly bicarinate at both base and apex with lateral traces of an apical transearina. Front tibiae inflated and basally constricted. Length, 14 mm.

The androtype is labelled "Durban lights, March, 1915, Marley."

GABUNIA, Kriech.

Sitzb. Nat. Ges. Leipz. 1895, p. 130.

Morley, Ann. S. Afr. Mus. xv, 1916, p. 383.

GABUNIA RUFICOXIS, Kriech.

Sitzb. Nat. Ges. Leipz. 1895, p. 132, ♂ ♀.

Nadia fasciipennis, Tosq. 1896, p. 337, ♀.

I have seen this species from Uganda, a considerable extension of range. It is the closest ally of *G. Bardo* (Ann. S. Afr. Mus. xv, 1916, p. 383), though the terebra is much longer, the head posteriorly narrower, the clypeus centrally produced and apices of the lower wings not totally infumate as in that species.

GABUNIA TOGENSIS, Krieg.

Mitt. Zool. Mus. Berl. v, 1911, p. 550, ♀.

Ernest A. Elliott, F.Z.S., has presented me with a ♀ of this handsome insect, taken by C. A. Wiggins at Entebbe in Uganda during June, 1912. *G. ruficeps*, Cam. (Entom. 1906, p. 30, ♀), from East Coast, Natal, seems a very closely allied species; I have not seen it.

TRIBE ECHTHROMORPHIDES.

ECHTHROMORPHA, Holmgr.

ECHTHROMORPHA VARIEGATA, Brullé.

Morph. Ann. S. Afr. Mus. 1916, p. 386.

Further specimens of both sexes have been taken by Jones during May, 1916, at Mfongosi in Zululand.

TRIBE PIMPLIDES.

EXERISTES, Först.

Verh. pr. Rheinl. 1868, p. 164.

Charitopimpla, Cam. Journ. St. Br. R. Asiatic Soc. 1902, p. 48;*Holcopimpla*, Cam. Ann. S. Afr. Mus. v, 1906, p. 112.

EXERISTES NIGRICORNIS, Cam.

Holcopimpla nigricornis, Cam. Ann. S. Afr. Mus. v, 1906, p. 113, ♀.

Cameron's new genus *Holcopimpla*, with its single species, is entirely synonymous with *Exeristes*, Först. In my table of the latter genus (Revis. Ichn. iii, 1914, p. 25) insert thus:

"(20). 21. Metanotum very sparsely punctate; areolet subpetiolate."

(3). a. Flavidous, apices of metathorax and second segment black-marked.
10°. *nigricornis*, Cam.

(a). β. Species not so coloured.

"(25). 22. Red with black markings; legs entirely pale."

Cameron omits to note that the head is buccate both below and behind the eyes, that the scape and flagellar base are both pale, that the thorax is discally deplanate, and that the wings are apically infumate with their stigma basally white. He only knew the ♀; the ♂ differs no more than sexually and in having the abdomen sublinear. Jones took several examples in Zululand at Mfongosi during May, 1916.

THERONIA, Holmgr.

Ofv. Vet. Ak. Förhdbl. xvi, 1860, p. 123.

THERONIA MELANOCERA, Holmgr.

Eugen. Resa Insect. 1868, p. 404.

In my diagnosis of this species (Revis. Ichn. iii, 1914, p. 41) for "metathorax" read "mesonotum." The length of both sexes varies, 10-12 mm. The present examples all have the anus infusate; they were bred at Johannesburg in the Transvaal in March, 1904; captured

at Mfongosi in Zululand in May, 1916, by W. E. Jones; and taken at "Kranzkloof" in Natal on May 24th, 1915, by Bell Marley.

XANTHOPIMPLA, Sauss.

Grandidier's Hist. Phys., Madagascar, 1892, Pl. XIII.

XANTHOPIMPLA RENOVATA, nom. nov.

Xanthopimpla appendiculata, Cameron, Ann. S. Afr. Mus. v, 1906, p. 111, ♀, *nee* Cameron, Fauna Maldives and Lacc. Arch. I, i, 1902, p. 51, ♂ ♀.

Cameron described two distinct species under a single name in this genus; consequently I have renamed the later of these. Marley took a large female of *X. renovata* at "Kranzkloof" near Durban in Natal (the typical locality) in May, 1915.

PIMPLA, Fabr.

Syst. Piez. 1804, p. 112.

PIMPLA CROCATA, Tosq.

Morley, Ann. S. Afr. Mus. xv, 1916, p. 386.

Both sexes from Mfongosi in Zululand in May, 1916 (Jones), and Durban in Natal during May, 1915 (Marley); Knysna, Cape (L. Péringuey).

PIMPLA PUBENS, sp. nov.

♂ only. A densely white-pubescent, dull red species with the head and thorax, anus, stigma and apical half of the hind legs black; wings hyaline with radices, tegulae and base of stigma pure white. Length, 10 mm.—Very like *P. crocata* in its sculpture and coloration, but with the palpi white, clypeus and mandibular base testaceous, the frons transaciculate and centrally stoutly carinate; scutellum and flagellum black, with scape rufescent below; abdomen more finely punctate, with basal segment distinctly longer; hind femora and tibiae darker, and the whole body shortly white-pubescent.

W. E. Jones captured the type at Mfongosi in Zululand during May, 1916.

EPIURUS, Thomson.

Opusc. Entom. xiii, 1889, p. 1412.

EPIURUS SEMIDILUTUS, sp. nov.

♂ only. A deep red and strongly nitidulous species with the head, except its testaceous palpi, the antennae, sternum and pleurae, meso-

notum except discally, the frenum, both base and apex of metathorax, base of first segment, apex of second narrowly and two apical marks on third, all the claws and hind tarsi, black. Basal segment paralleled, double as long as broad and not discally canaliculate; lower basal nervure postfureal. Length, 10 mm.—This species agrees in every way with the characters, set forth in my table of *Epiurus* (Revis. Ichn. iii, 1914, p. 80, in which at No. “(30) 27” for “hind claws” read “hind claw-joint”), of *E. dilutus*, Ratz., the ♂ of which was first described by Bridgman (Entom. xii, 1879, p. 55), who remarks upon its subglabrous abdomen. Therefrom the present male differs in no more than a few essential details: Mesonotum subglabrous and less closely pubescent, mesopleurae transversely sulcate centrally and more deeply punctate below, metanotum glabrous with sparse puncturation and lacking basal carina; abdomen stouter with the dorso-lateral tubercles a little more prominent; hind tarsi black throughout; tegulae fulvous, costa and stigma black, upper basal nervure far more oblique and the lower distinctly a little postfureal; but especially in having the first segment glabrous and discally smooth with subapical lateral foveae and its base simple, whereas in *E. diluta* it is discally sulcate and bicarinate from the laterally auriculate base to a subapical transestriction.

The type is labelled “C. W. Mally, Agrl. Dept., Elsenberg, Cape Colony, October 11th, 1914.”

HEMIPIMPLA, Sauss.

Grandidier's Hist. Phys. Madagascar, 1892, Pl XIII, fig. 4.

HEMIPIMPLA DIVISA, Tosq.

Mém. Soc. Entom. Belg. v, 1896, p. 302, ♀.

♂ ♀. The male has hitherto been unknown. It differs only sexually from the female in—at least occasionally—having the lateral tubercles of the second and third segments infusate. I do not find that the ♀ has either the hind tarsi or apices of their tibiae black, as indicated by its author; in both sexes they are but little darker than the remainder of the pale fulvidous legs, with nothing but the tarsal claws black. Both sexes occurred to Jones at Mfongosi in Zululand during April and May, 1916.

HEMIPIMPLA TEREBRATA, sp. nov.

♀ only. Head, thorax and legs nitidulous and testaceous-red, with mandibular apices and both hind tibiae and their tarsi alone black. Antennae filiform and black. Abdomen deep black with the three

basal segments testaceous-red. Metathorax not flavous-marked, exareolate, with circular spiracles and a black dot on either side of its apex. Basal segment discally shining and centrally transimpressed, remainder closely punctate to sixth; the second apically black-lined on either side; terebra exactly as long as whole body. Hind femora simple; tarsal claws basally lobate and not pectinate. Wings fulvescent with apices of both pairs black, the front ones alone with a concolorous band as broad as the stigma and extending therefrom to the sinus, broadly confluent in the anal cell with the apical infumation; nervures of basal half red; areolet broadly triangular and not petiolate, emitting the subentire recurrent from its apical fourth; nervelet extending half way to basal nervure; nervellus subopposite and centrally intercepted. Length, 15 mm.—In my table of species (Revis. Ichn. iii, 1914, p. 90) this female should stand next to *H. divisa*, Tosq. The alar infumation resembles that of *H. bifasciata*, though not extending along the inner margin of the hind wing, as in that species.

The type (in coll. auct.) was taken by C. A. Wiggins at Entebbe in Uganda during June, 1912, and presented to me by Ernest A. Elliott, F.Z.S.

TRIBE LISSONOTIDES.

SYZEUCTUS, Först.

Verh. pr. Rheinl. 1868, p. 167.

SYZEUCTUS SPILOCEPHALUS, Cam.

Lissonota piloccephala, Cam. Ann. S. Afr. Mus. v, 1906, p. 124, ♂.

Its author precedes this species with a query, as though doubtful of its right to inclusion in the genus *Lissonota*; this and, I believe, the majority of the species described by him at *loc. cit.* are referable to the genus *Syzeuctus*.—The ♀ differs, as is usual in the genus, considerably in coloration from the ♂, though the sculpture is identical. Head, antennae and thorax black; clypeus, part of mandibles, sides of face broadly and all the orbits narrowly, stramineous; propleural margin, subhamate mesonotal lines, post-scutellum and both sides and apex of scutellum stramineous; metapleural spiracles elongate. Abdomen brick-red throughout, becoming flavescens at apices of the second and third segments; terebra straight, black and as long (8 mm.) as the abdomen. Legs brick-red, with the posterior discally black and the front coxae stramineous. Wings slightly flavescens, with apices of both pairs truncate and definitely infumate; stigma and subcosta testaceous;

radial nervure straight above the small areolet, which is no higher than the length of its petiolar nervure, subtriangular, externally curved, emitting recurrent nervure from its apical fourth; spurious nervure of hind wing straight to apex. Length, 12 mm.

This gynetype was captured by R. M. Lightfoot at East London during 1915.

SYZEUCTUS FUSCICORNIS, Cam.

Lissonota fuscicornis, Cam. Ann. S. Afr. Mus. v, 1906, p. 121, ♀.

♂ ♀. The conformation of the areolet and metapleural spiracles of both sexes is exactly as in *S. spilocephalus*; the spurious nervure of the hind wing is strong, though hardly extending to apex. The ♀ has the three basal segments laterally black-lined.—The undescribed ♂ differs only in its smaller size of 11 mm. and the coloration of its abdomen, the spiracles of whose three basal segments are rather more conspicuous; the last is black with a quadrate subbasal fascia; apices of the basal segment broadly and of the following narrowly flavous with base of second, third and fourth centrally concolorous; the anus from centre of fourth segment alone is red.

Both sexes were taken at Mfongosi in Zululand during April, 1916, by Jones.

SYZEUCTUS INTERSTITIALIS, Cam.

Lissonota interstitialis, Cam. Rec. Albany Mus. i, 1905, p. 251.

♂ ♀. The conformation of the areolet and metapleural spiracles of both sexes is exactly as in *S. spilocephalus*; the spurious nervure of the hind wing is wanting. The ♀ differs from the last species in having the black and straight terebra no longer (6 mm.) than the abdomen, and the ♂ in having the red abdomen apically black from centre of the fourth segment.

The female occurred with *S. fuscicornis* in Zululand; and the male at Gt. Winterhock near Tullbagh, Cape, at 3600 ft. to R. M. Lightfoot during April, 1916.

ASPHRAGIS, Först.

Verh. pr. Rheinl. xxv, 1868, p. 166.

ASPHRAGIS FLAVIDORBITALIS, Cam.

Entom. xxxix, 1906, p. 18, ♀.

♂ ♀. For length "5 mm." read "15 mm.," which includes the body $7\frac{1}{2}$ and terebra $7\frac{1}{2}$. The unguual pectination is strong. The

undescribed ♂ differs only sexually from the female.—Found at the same locality as *S. interstitialis* by R. M. Lightfoot.

ASPHRAGIS RUBRICOSA, sp. nov.

♀ only. A dull closely punctate, rosy species, becoming posteriorly black, with only the anterior femora and tibiae laterally testaceous. Head posteriorly constricted; clypeus neither basally discreted nor its evenly rounded apex impressed; cheeks not short; juxta-scerbal orbits alone shortly stramineous. Antennae filiform, slender and black with base of the first three or four joints, and the entire scape, rosy. Thorax dull and discally deplanate, with neither notauli nor sternauli; its sternum black; metathorax strongly and closely punctate, its apical transcarina subentire and spiracles circular. Scutellum closely and more finely punctate, distinctly a little convex. Abdomen deplanate, no longer than head and thorax, with the three basal segments evenly punctate, remainder black and subglabrous and retracted; first segment double as long as apically broad, longitudinally rugulose discally, with spiracles before centre; terebra as long ($2\frac{1}{2}$ mm.) as three first segments, or two-thirds of abdomen. Legs not slender; hind ones, intermediate coxae except discally, and their trochanters, black; claws strongly pectinate. Wings hyaline and not broad; radix testaceous, tegulae and stigma black; basal nervure strongly arcuate and subcontinuous through the median; intercubital nervure slightly longer than distant from second recurrent, of which nearly the upper half is fenestrate; radius obtusely angled; nervellus opposite and indistinctly intercepted a little below its centre. Length, 8 mm.—Stouter, less elongate and more deeply punctate than the last species, from which the colour renders its facies very different, though the neurulation is similar.

Found by W. E. Jones at Mfongosi in Zululand during May, 1916.

TRIBE BANCHIDES.

TEGONA, Morley.

Fauna India, Ichn. i, 1913, p. 251.

TEGONA DISCRETA, sp. nov.

♀ only. A clear testaceous species with the head flavous; the frons, occiput, antennae, central mesonotal lobe and hind tarsi, black; wings clear fulvescent, with costa and stigma testaceous. Head not strongly constricted posteriorly; clypeus strongly elongate, as long as

basally broad and apically truncate, closely punctate and not discreted from the similarly punctate face; mandibles stout and obtusely bidentate apically, teeth nigrescent; both maxillary and labial palpi testaceous, with cylindrical joints; eyes internally parallel and not emarginate; frons sulcate from ocelli to the superiorly elevated scrobes. Antennae elongate, setaceous, slender and immaculate. Thorax stout, dull and closely punctate; notauli deeply impressed, sternauli wanting; mesopleural speculum foveate; metathorax without even supracoxal carinae, impressed at the slightly elongate spiracles, its disc longitudinally subsulcate. Scutellum and postscutellum convex, deeply punctate, with only basal carinae. Abdomen glittering and subglabrous, with two first segments deplanate and remainder subcompressed; basal segment straight, slightly explanate throughout, twice and a half as long as apically broad and centrally constricted beyond the somewhat prominent spiracles; central segments indefinitely black-lined laterally; hypopygium large and cultriform; terebra hardly exerted. Legs slender, the hind ones elongate, with apices of their tibiae infusate; coxae finely punctate; claws distinctly and shortly pectinate. Wings ample; lower basal nervure but slightly postfureal; internal cubital entire and broadly fenestrate at its apical third; areolet rhomboidal and corneously petiolate, emitting the semi-fenestrate recurrent distinctly before its centre; nervellus elongately postfureal, emitting spurious nervure from its upper third. Length, 11 mm.—The produced clypeus places this species in *Tegona* (*cf. lib. cit.*, fig. lxii), though the cheeks are much shorter than the basal breadth of the mandibles.

The type was discovered by W. E. Jones at Mfongosi in Zululand during April, 1916.

TRIBE SKIAPODES, *tribus nova*.

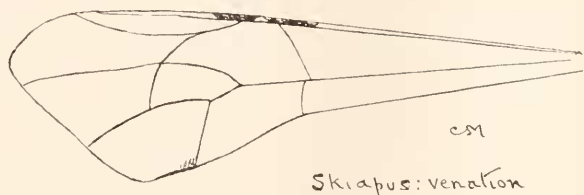
The characters are those of the genus. So remarkable is the conformation of the following species that I find myself reluctantly compelled to erect for its reception a new Tribe, agreeing in its abdominal structure to a limited extent with the *Banchides*, as grouped by me (*Rev. Ichn.* iv, 1915, p. 135), but with totally different and unique neuration. The *Skiapodes* is at once known from the whole remainder of the Ichneumonidae by its semicircularly excised occiput, the sublincar disposition of the ocelli, the bicarinate frons, minute and subquadrate mandibles, which are (as in the Braconidous family Alysidae) porrect and not apically touching *inter se*, and by the unique structure of both nervures, which most closely, perhaps,

resemble those of the Ophionides, and hind tarsi, which are of greater length than the whole body. In certain respects the neuration is not dissimilar to that of *Lapton*, as figured by Pfankuch (at Deut. Entom. Zeit. 1912, p. 458), though the intercubital nervure is strongly oblique, and not, as there shown, vertical; also the hypopygium in both is prominent.

I need hardly point out that the Skiapodes were a fabulous people of Libya, possessed of enormously developed feet.

SKIAPUS, gen. nov.

Head very strongly transverse; occiput semicircularly excavate centrally immediately behind ocelli, which are not in triangle but in a curved line with the lateral only half their breadth behind the



central; frons strongly bicarinate and centrally sulcate between the scrobes; eyes large and acutely emarginate internally; face transverse and longitudinally impressed on either side above base of the minute and triangular clypeus; cheeks obsolete; mandibles porrect and very small, nearly quadrate, lower tooth minute and upper wanting; labrum strongly exerted, longitudinally carinate discally; mandibular palpa joints cylindrical. Antennae longer than body, filiform and not slender, apically setaceous. Thorax stout, notauli and sternauli wanting; mesonotum abruptly declivous anteriorly; scutellum glabrous, not convex, laterally finely carinate; metathorax very short, obliquely declivous throughout, and not centrally impressed; glabrous and exareolate, with two evenly curved carinae traversing its basal half, of which the first centrally touches the base; spiracles large and linear; apophyses wanting. Abdomen small and coarctate, strongly compressed from base of third segment; first segment petiolate and linear to spiracles at its apical fourth, and thence slightly explanate; thyridii wanting; venter plicate, with hypopygium protuberant, and ♀ valvulae half length of basal segment. Legs long and slender, with the hind ones extraordinarily elongate; all tibiae externally setiferous; hind coxae large and globose, discally sulcate and as long as meta-

thoracic disc, their femora extending to anus ($4\frac{1}{2}$ mm. in length) and exactly as long as tibiae; hind tarsi slender, cylindrical and fully as long in ♂, or longer ($10\frac{1}{2}$ mm.) in ♀, than the whole body, sparsely and strongly setiferous and pilose with base of all joints glabrous, their claws simple but apical half of unguiculi stoutly pectinate laterally and below; all the claws straight and apically attenuate, the anterior alone basally pectinate. Wings ample; stigma obsolete; inner cubital cell apically acute; areolet wanting; the strongly oblique intercubital nervure receiving second recurrent, inner and outer cubital nervures at a common point; sinus infumate; nervellus strongly geniculate at its upper fourth.

SKIAPUS COALESCENS, sp. nov.

♂ ♀. A bright flavous species, with extreme mandibular apices, ocellar region, the central occipital impression, antennae except underside of scape, three mesonotal vittae, a radical dot, spicula and its valvulae except apically, and whole of hind tibiae and tarsi, black; stigma and nervures infusate, with centre of the former rufescent; wings subhyaline, evenly and but very slightly infumate throughout. Length, 8-10 mm.

The type of this remarkable tribe and genus is in my collection; it was captured at Stella Bush, near Durban, in Natal, by H. W. Bell Marley during April, 1915. I do not anticipate that the species is rare, for W. E. Jones has found it at Mfongosi in Zululand in May, 1916, F. Muir about Durban in 1902 (in coll. Mus. Brit.), and S. A. Neave considerably extended its known range by his discovery of the unique male on February 4th, 1913, at Mlanje in Nyassaland.

SUBFAMILY TRYPHONINAE.

TRIBE BASSIDES.

BASSUS, Fall.

Specimen, Hym. 1813.

BASSUS LAETATORIUS, Fab.

Cam. Ann. S. Afr. Mus. v, 1906, p. 131.

Morl. *loc. cit.* xv, 1916, p. 391.

This cosmopolitan species has now penetrated to Zululand, where W. E. Jones took it at Mfongosi during April, 1916.

SUBFAMILY OPHIONINÆ.

TRIBE OPHIONIDES.

ALLOCAMPTUS, Thoms.*

Opusc. Entom. xii, 1888, p. 1186.

ALLOCAMPTUS SENESCENS, Tosq.

Mém. Soc. Entom. Belg. v, 1896, p. 375, ♂.

Found by Dr. Melle. Arcturus, 1915, Salisbury in Mashonaland, and by Jones at Mfongosi in Zululand.—The ♀ differs only sexually; in the present instance, also in having the nervellus interrupted at a slightly higher point, and the thorax of a paler colour, than the male.

ALLOCAMPTUS CRASSELLUS, sp. nov.

♂ only. A testaceous species with head mainly flavous, stigma and costa and flagellum nigrescent; agreeing in all essential characters with the Australasian *A. crassus* (Revis. Ichn. i, 1912, p. 26), but much smaller with the stigma darker, and base of radial nervure strongly sinuate. Basal nervure continuous through median, nervellus geniculate at its lower third, scutellum deplanate and laterally carinate only to its centre; metanotum shagreened with its basal region smoother. From all African species with corneous alar marks, the posterior breadth of the head, which is no less than that of the eyes, will distinguish it. Length, 17 mm.

Captured at Mfongosi in Zululand during March, 1916, by W. E. Jones.

ALLOCAMPTUS NUGALIS, Schulz.

Spolia Hymen. 1906, p. 275, ♀.

A female was taken at Durban in Natal by Marley in March, 1915. I have examined the type of Schulz' species, which is in the British Museum.

* I should like to take the opportunity of correcting the synonymy of *ALLOCAMPTUS LATILINEATUS*, Cam., found in Mexico, Guatemala, Paraguay, and Brazil:

Ophion curvinervis, Cameron, Biologia Centr.-Amer. Pl. XLVIII, 1886, Hym. i, p. 293, Pl. XII, fig. 19, ♀ (*nec* Kriech.).

Ophiomorpha curvinervis, Szépligeti, Gen. Ins. fasc. xxxiv, 1905, p. 35.

Ophion latilineatus, Cameron, Journ. R. Agric. Soc. Demerara, i, 1911, p. 179.

Allocamptus renovatus, Morley, Revision Ichneumonidae, i, 1912, p. 23, ♀ ♂.

HENICOSPILUS, Steph.

Illus. British Entom. vii, 1835, p. 126.

HENICOSPILUS VECORS, Tosq.

Mém. Soc. Entom. Belg. v, 1896, p. 387.

Marley took a large male at Stella Bush near Durban during January, 1914.

HENICOSPILUS RUFUS, Kriech.

Berl. Entom. Zeit. 1894, p. 307 (*nec* Brullé *neenon* Tosq.).

Represented by both sexes from Stella Bush near Durban in Natal in November, 1915 (Marley), Mfongosi in Zululand during April, 1916 (Jones), and Salisbury in Southern Rhodesia (D. Dodds). A ♀ from "Bonnefoi, Transvaal," is in the Berlin Entom. Mus.

HENICOSPILUS LONGESCUTELLATUS, Kriech.

Berl. Entom. Zeit. 1894, p. 308, ♀.

A female was bred by Marley in Natal during August, 1915, from its own white dull and nearly smooth cocoon of the shape usual to this genus, out of the Noctuid moth, *Phytometra limbirena*, Guén.

HENICOSPILUS LEIONOTUS, Tosq.

Mém. Soc. Entom. Belg. v, 1896, p. 393.

Marley also bred this male at Durban in March, 1915, from its own dull chocolate-coloured cocoon with a pale central cincture; host not given.

NOTOTRACHYS, Marshall.

Tr. Ent. Soc. 1872, p. 260.

NOTOTRACHYS FLAVOMACULATUS, Cam.

Rec. Albany Mus. i, 1905, p. 250.

A couple of ♀♀ found by W. E. Jones at Mfongosi in Zululand in May, 1916.

TRIBE PANISCIDES.

PANISCUS, Grav.

Ichn. Europ. iii, 1829, p. 622.

PANISCUS AETHIOPICUS, Szépl.

Bull. Mus. Paris, 1907, p. 139, ♀.

Both sexes are from Mfongosi in Zululand during April, 1916 (W. E. Jones), and from Kimberley during October, 1913 (Bro. J. H. Power).

PANISCUS OCELLARIS, Szépl.

Kilimandj. Exped. ii, 1910, p. 89, ♀.

A male (which sex I described in Revis. Ichn. ii, 1913, p. 116) was found by W. E. Jones at Mfongosi in Zululand during May, 1916.

TRIBE PRISTOMERIDES.

PRISTOMERIDIA, Ashm.

Proc. U. S. Nat. Mus. 1900, p. 100.

This differs from the next genus in no constant character but the straight nervellus, which is neither geniculate nor intercepted.

PRISTOMERIDIA ALBESCENS, sp. nov.

♂ ♀.—♂. A very pale stramineous, dull and apparently debilitating species with the mandibular apex, a line connecting ocelli, a vitta on each of the three mesonotal lobes, [scutellar fovea, frenum, speculum, hind tarsi, base and apex of their tibiae, inner side of their coxae and more or less of anus, indefinitely brunneous or nigrescent; flagellum infusate with joints of its basal half apically flavidous and the first pale beneath. Face short, shining and finely punctate, longitudinally elevated centrally and discreted from the convex and apically rounded clypeus; mandibular teeth of equal length, cheeks normal. Mesonotum dull and finely shagreened, its apex prominent and abruptly declived but with superficial notauli; scutellum convex, nearly circular and whitish, only basally margined; metathorax obsoletely scabriculous, both its transcarinae distinct with very indistinct and subtriangular areola; petiolar area trans-strigose. Abdomen linear, somewhat dull and evenly shagreened throughout, with the thyridii of second segment elongate and genital valvulae exerted. Legs slender; hind femora stout with an acute tooth, followed by a series of serrations, slightly beyond centre. Wings ample and hyaline with nervures and the very broad stigma black; basal continuous through median; nervellus neither geniculate nor intercepted.

The ♀ shows remarkable transition to the Cremastides, and suggests that the present tribe cannot long be retained distinct therefrom. Its hind femora bear no more than the slightest trace of a tubercle, followed by a series of very fine trans-striae. In other respects it differs from the male in nothing but its black and subaeiculate two basal segments, nigrescent metanotum and centre of the third and

fourth segments; the terebra is straight, black and half length of abdomen. Length, ♂ ♀, 5-5½ mm.

A couple of males were found with one female by W. E. Jones at Mfongosi in Zululand, April, 1916.

PRISTOMERUS, Curtis.

Brit. Ent. xiii, 1836, p. 624.

PRISTOMERUS LUTEOLUS, Tosq.

Mém. Soc. Entom. Belg. v, 1896, p. 421, ♂.

It is surprising that no additional species of this genus have been brought forward since Tosquinet (*loc. cit.*) described three. The present male was from Gambia; but a second, captured by D. Dodds at Salisbury in South Rhodesia, is certainly not distinct and represents a wide range.

TRIBE CREMASTIDES.

CREMASTUS, Grav.

Morley, Ann. S. Afr. Mus. xv, 1916, p. 393.

CREMASTUS ANNULICORNIS, Tosq.

Mém. Soc. Entom. Belg. v, 1896, p. 416, ♀.

I am not aware that this species has been mentioned since first described from Delagoa Bay; and the ♂ is still unknown. The dark stigma bordered by the pale costa is remarkable. The only species since described from all Africa appears to be *C. testaceus*, Szépl. (Kilimandjaro Exped. viii, 3, 1910, p. 50).*

One female occurred to Jones at Mfongosi in Zululand during May, 1916.

CREMASTUS NOXIOSUS, Morl.

Fauna India, Ichn. i, 1913, p. 501, ♂ ♀.

A male, differing in no pertinent particular from the typical Bengal type of this species was captured in Natal by Marley during March, 1916.

CREMASTUS CYPETE, sp. nov.

♀ only. A strongly elongate, dull species with mandibles, orbits throughout, elongate lines before radices coalescent with two hamate

* Also here must be added *RICRENA PALLIDIFENNIS*, Cameron, Ann. S. Afr. Mus. v, 1906, p. 104, which I noted as belonging to the *Cremaستides*, and not (as placed by its author) to the *Porizonides*, when examining the reputed type in the British Museum.

mesonotal vittae, apices of third to fifth segments centrally, venter and a dot beneath anterior coxae, flavous; legs, and marks near apices of second and third segments, more or less dark rufescent. Head dull and distinctly punctate with only scrobes glabrous; face not convex, its apex discreted from the reflexed and apically rounded clypeus; juxta-antennal orbits elevated. Antennae not pale-marked. Thorax dull and somewhat deeply punctate throughout, with obsolete notauli; metathoracic areae entire; basal area narrow, areola large and subparallel-sided, twice longer than broad and emitting strong costulae from its basal third. Scutellum deplanate, not margined, as deeply punctate as the thorax. Abdomen finely shagreened with second segment aciculate throughout, its thyridii basal; terebra deflexed, black and longer ($5\frac{3}{4}$ mm.) than whole abdomen (5 mm.). Wings hyaline with stout nervures; stigma broad and black; base of apical abscissa of radius strongly sinuate; brachial cell very narrow; nervellus neither geniculate nor intercepted. Length, 8 mm.

The type is labelled: "Hottentots' Holland Mts. 4000 feet. Caledon, Cape, Barnard, 1916."

TRIBE CAMPOPLEGIDES.

XANTHOCAMPOPLEX, Morl.*

Fauna India, Ichn. i, 1913, p. 445.

XANTHOCAMPOPLEX FLAVESCENS, sp. nov.

♂ ♀. A dull and very slender species, the wings hyaline and body clear flavous with only the mandibular apices, ocellar region, flagellum and disc of scape, terebral valvulae, hind tarsi and apices of the anterior, black; central mesonotal vitta nigrescent and in ♂ extending to scutellum, sometimes with a pale brunneous one on either side. Metathorax shagreened with a curved basal transcarina touching the base centrally, to which the parallel-sided and trans-striolate petiolar area extends; spiracles linear. Basal segment glabrous, gradually explanate apically and longer than the terebra. Discal spines of the hind tibiae strong; tarsi pectinate. Wings somewhat narrow, with tegulae and stigma flavidous; lower basal nervure postfural; radius

* XANTHOCAMPOPLEX NIGROMACULATUS is the only described species—*Zachresta* (sic) *nigromaculata*, Cam. Ann. Nat. Hist. xx, 1907, p. 13, ♀ = *Xanthocampoplex orientalis*, Morl. Faun. India, Ichn. i, 1913, p. 445, ♂ ♀. The Berlin Museum possesses this species from Sumatra and twenty-three specimens, comprising both sexes, which were collected by Col. Bingham in Sikkim

elongate and but slightly curved; petiole of the oblique areolet as long as its inner nervure; both the outer cubital and second recurrent nervures emitted from lower external angle of areolet; hind wings with both the radial and cubital nervures pellucid beyond the recurrent; nervellus entire, straight and not intercepted. Length, 8-9 mm.

Both sexes occurred to W. E. Jones at Mfongosi in Zululand during April and May, 1916.

OMORGA, Thoms.

Opusc. Entom. xi, 1887, p. 1125.

OMORGA LONGICEPS, Cam.

Linnerium longiceps, Cam. Ann. S. Afr. Mus. v, 1906, p. 100, ♀.

The ♂ differs very slightly in having the mandibles, palpi, tegulae and the anterior coxae and trochanters, pure white; the hind coxae and trochanters stramineous, and the basal joint of their tarsi not pale-marked. The structure of the nervellus was overlooked by Cameron; it is antefurcal and geniculate, relegating the species to Thomson's genus *Omorqa*, with which the conformation of the basal segment also agrees.

The androtype was captured at Mfongosi in Zululand by W. E. Jones in May, 1916.

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